

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	5	((("6477458") or ("5544481")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/11/02 12:42
L2	71	@pd<"20040331" and (regenerat\$3 or purge) near12 (slope or gradient) near12 (signal or probe or sensor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2010/11/02 12:46
L3	9	@pd<"20040331" and (regenerat\$3 or purge) near12 (slope or gradient) near12 (signal or probe or sensor) and fuel	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2010/11/02 12:48
S1	99	ODENDALL near1 BODO	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 08:01
S2	99	ODENDALL near1 BODO	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 13:58
S3	31	S2 and lambda	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 13:58
S4	21	(lambda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) near8 (charge or discharge or purge or empty) near8 (catalyst or catalytic near5 exhaust)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 14:19

S5	25	(lambda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) near8 (charge or discharge or purge or empty) near8 (catalyst or catalytic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 14:19
S6	5	(lambda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) near8 (charge or discharge or purge or empty) near8 (catalyst or catalytic) and 60/285.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 14:20
S7	2	02/16127	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 14:36
S8	13	"0216127"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 14:37
S9	0	fr "0216127"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 14:37
S10	1	2003WO-FR03693.ap.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 14:43
S11	1	2004-509270.NRAN.	DERWENT	ADJ	ON	2009/06/17 14:50
S12	1420	(lambda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) near8 (((upstream or before) and (downstream or after)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 15:22
S13	382	S12 and (60/285.ccls. or 60/273.ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 15:23

S14	155	S12 and optimal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 15:24
S15	5	S12 and optimal near3 (storage or capacity)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 15:24
S16	17	S12 and voltage (region or range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 15:25
S17	2	voltage near2 (region or range) near8 (lambda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) near8 ((upstream or before) and (downstream or after))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/17 15:26
S18	55	((lambda or air/fuel or air- fuel or air adj fuel) near2 (sensor or probe) near8 ((upstream or before) and (downstream or after)) and ((three or "3") adj (step)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 08:55
S19	102	((lambda or air/fuel or air- fuel or air adj fuel) near2 (sensor or probe) near8 (((upstream or before) and (downstream or after)) and ((three or "3") near1 (step)))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 08:57
S20	9	(09/456503   09/921690   10/248529   10/375798   10/408121   10/435053   10/601243   10/791852   11/607005   11/637116   11/794199).APP.	USPAT; USOCR	ADJ	ON	2009/06/18 08:57
S21	35	S18 not S20	USPAT; USOCR	ADJ	ON	2009/06/18 08:57

S22	3	voltage near2 (region or range) near8 (lambda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) near8 ((upstream or before) or (downstream or after)) and (lambda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) near8 ((upstream or before) or (downstream and after))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 09:01
S23	0	("2006/0123769").URPN.	USPAT	ADJ	ON	2009/06/18 09:04
S24	42	(lambda or lamda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) same voltage near2 (region or range) and (lambda or lamda)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 09:08
S25	72	(lambda or lamda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) same (voltage or resistant) near4 (region or range) and (lambda or lamda)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 09:08
S26	72	(lambda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) same (voltage or resistant) near4 (region or range) and (lambda)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 09:09
S27	141	(lambda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) same (voltage or resistant) near4 (region or range)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 09:09
S28	72	(lambda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) same (voltage or resistant) near4 (region or range) and (lambda)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 12:52
S29	3776	(wide range or linear) near2 (sensor or probe) same (voltage or resistan \$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 12:53

S30	641	(wide range or linear) near2 (sensor or probe) same (voltage or resistanc\$4) and exhaust	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 12:54
S31	135	(wide range or linear) near2 (sensor or probe) same (voltage or resistanc\$4) and exhaust and lambda	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 12:54
S32	83	(wide range or linear) near2 (sensor or probe) same (voltage or resistanc\$4) and exhaust and lambda and @pd<"20041208"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 12:54
S33	10	(lambda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) same (voltage or resistant) near4 (region or range) and (lambda) and binary	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 12:56
S34	3	(lambda or air/fuel or air-fuel or air adj fuel) near2 (sensor or probe) same (voltage or resistant) near4 (region or range) and (switching point)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 13:05
S35	4432	(wide range or linear or lambda) near2 (sensor or probe) same (voltage or resistanc\$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 13:19
S36	109	S35 and mV and exhaust and @pd<"20041208"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 13:20
S37	7	(wide range or linear or lambda) near2 (sensor or probe) and (forced modulation)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 13:46

S38	50	lambda near4 linear and (60/277.ccls. or 60/285.ccls.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 15:22
S39	30	lambda near4 linear and (60/277.ccls. or 60/285.ccls.) and @pd< "20041206"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/18 15:22
S40	5	(09/852349   09/855743   10/056814   10/064310   10/141682).APP.	USPAT; USOCR	ADJ	ON	2009/06/18 15:37
S41	21	S39 not S40	USPAT; USOCR	ADJ	ON	2009/06/18 15:37
S42	0	de4128823	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/19 09:28
S43	1	de "4128823"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/19 09:28
S44	0	((linear) near2 (sensor or probe) near8 (charge or discharge or purge or empty or fill) near8 (catalyst or catalytic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/19 09:36
S45	2	((linear) near4 (sensor or probe) same (charge or discharge or purge or empty or fill) near8 (catalyst or catalytic)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/19 09:37
S46	128	(charge or discharge or purge or empty or fill) near8 (catalyst or catalytic) near9 (30% or 70%)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/19 09:48

S47	8	(charge or discharge or purge or empty or fill) near8 (catalyst or catalytic) near9 (30% or 70%) and exhaust	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/19 09:49
S48	90	(charge or discharge or purge or empty or fill) near8 (catalyst or catalytic) near9 (\$2%) and exhaust	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/19 09:55
S49	62	S48 and @pd< "20041206"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/19 09:57
S50	17	"5207056"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/06/19 10:23
S51	2	de "10305452"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2009/11/24 09:07
S52	2	de "10307457"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2009/11/24 09:08
S53	1	de "10026379"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2009/11/24 09:08
S54	2	de "10008563"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2009/11/24 09:09

S55	1	de "10008564"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2009/11/24 09:09
S56	13	@pd< "20051208" and (lambda or air near1 fuel or airfuel or air/fuel) near6 (sensor or probe) near9 (linearize or trim control or highpass or high pass or lowpass or low pass) and "60".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/11/30 15:40
S57	16	@pd< "20051208" and (oxygen or lambda or uego) near6 (sensor or probe) near9 (linearize or trim control or highpass or high pass or lowpass or low pass) and "60".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/11/30 15:57
S58	11	"5140535"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2009/11/30 16:06
S59	22	@pd< "20051208" and (oxygen or lambda or uego or hego or ego) near6 (sensor or probe) near9 (linearize or trim control or highpass or high pass or lowpass or low pass) and "60".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/11/30 16:16
S60	199	@pd< "20051208" and (oxygen or lambda or uego or hego or ego) near6 (sensor or probe) near9 (oxygen or o2 or "o. sub.2") near5 (storage or capacity) and "60".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/11/30 16:17
S61	36	@pd< "20051208" and (oxygen or lambda or uego or hego or ego) near6 (sensor or probe) near9 (oxygen or o2 or "o. sub.2") near5 (storage or capacity) and (storage or capacity) near9 range and "60".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/11/30 16:22



S62	4	@pd< "20051208" and (oxygen or lambda or ugeo or hego or ego) near9 (sensor or probe) near9 (oxygen or o2 or "o.sub.2") near5 (storage or capacity) near9 range and "60".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	ON	2009/11/30 16:25
S63	3	"11296507"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2009/12/01 09:03
S64	31	"5901552"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2010/06/10 09:51
S65	2	("5901552").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/06/10 09:51
S66	2	("6253542").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/06/10 09:51
S67	2	("6792314").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/06/10 09:53
S68	2	("20060129203").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/06/10 10:01
S69	1	(10/594478).APP.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2010/06/10 10:03

S70	43	(US-20090138182-\$ or US-20040197718-\$ or US-20040107696-\$ or US-20040103642-\$ or US-20040006973-\$ or US-20030221415-\$ or US-20030074888-\$ or US-20030010016-\$ or US-20020005039-\$ or US-20060185349-\$ or US-20040060550-\$ or US-20020026789-\$ or US-20010000956-\$ or US-20060123769-\$).did. or (US-6826902-\$ or US-6718754-\$ or US-6684628-\$ or US-6378295-\$ or US-6209314-\$ or US-5706653-\$ or US-5390651-\$ or US-5359852-\$ or US-5291417-\$ or US-5224345-\$ or US-5140535-\$ or US-6945033-\$ or US-6911184-\$ or US-6550307-\$ or US-6463735-\$ or US-6301878-\$ or US-6205773-\$ or US-6128898-\$ or US-6055972-\$ or US-5901552-\$ or US-5519992-\$ or US-5293740-\$ or US-5207056-\$).did. or (DE-10331334-\$ or DE-10307457-\$ or DE-10305452-\$).did. or (WO-0153672-\$ or EP-1160425-\$ or DE-10307457-\$).did.	US-PGPUB; USPAT; EPO; DERWENT	ADJ	OFF	2010/06/10 10:48
S71	28	@pd< "20040331" and S70	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2010/06/10 10:48
S72	3	"11296507"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2010/06/10 10:49
S73	19	bodo near2 odendall and @pd< "20040331"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2010/06/10 10:50

S74	1	bodo near2 odendall and @pd< "20040331" and (sensor or probe)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2010/06/10 10:50
S75	4	@pd< "20040331" and "60".clas. and (regenerat \$3 or purge) near12 (slope or gradient) near12 (signal or probe or sensor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ADJ	OFF	2010/10/25 10:11

**EAST Search History (Interference)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L4	0	60/273,284-286,299- 301.ccls. and ((gradient near9 sensor) and oxygen component and mass near4 fuel near5 correct).clm.	US-PGPUB; USPAT; UPAD	ADJ	ON	2010/11/02 12:50

**11/ 2/ 2010 12:50:19 PM**

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